

Claims

[c1] What is claimed is:

1. An electrostatic discharge protection circuit comprising:

a first printed circuit board comprising a first grounding line;

a flexible cable comprising a connecting line having one end connected to the first grounding line, and an electrostatic discharge protection path having one end connected to the first grounding line;

a second printed circuit board comprising a second grounding line electrically connected to another end of the connecting line; and

a housing connected to another end of the electrostatic discharge protection path.

[c2] 2. The electrostatic discharge protection circuit of claim 1 wherein the first printed circuit board is fixed on a tray of an optical disk drive and the second printed circuit board is fixed in the housing.

[c3] 3. The electrostatic discharge protection circuit of claim 2 wherein the optical disk drive is a slim optical disk drive.

- [c4] 4. The electrostatic discharge protection circuit of claim 1 wherein the flexible cable is a U-shaped flexible cable.
- [c5] 5. The electrostatic discharge protection circuit of claim 1 wherein the other end of the electrostatic discharge protection path is connected to the housing without insulation.
- [c6] 6. An electrostatic discharge protection circuit located between a printed circuit board and an electric appliance, wherein the improvement comprises:
an electrostatic discharge protection path installed between the printed circuit board and the electric appliance for receiving an electrostatic discharge current generated by the electric appliance and conducting the electrostatic discharge current to a housing directly.
- [c7] 7. The electrostatic discharge protection circuit of claim 6 wherein the electrostatic discharge protection path is in a flexible cable connected between the electric appliance and the circuit board.
- [c8] 8. The electrostatic discharge protection circuit of claim 7 wherein the flexible cable is a U-shaped flexible cable.
- [c9] 9. The electrostatic discharge protection circuit of claim 7 wherein one end of the electrostatic discharge protection

path is connected to the housing without insulation.

[c10] 10.The electrostatic discharge protection circuit of claim 9 wherein another end of the electrostatic discharge protection path is electrically connected to the electric appliance.

[c11] 11.The electrostatic discharge protection circuit of claim 6 wherein the electric appliance is installed on a tray of an optical disk drive and the circuit board is fixed in the housing.

[c12] 12.The electrostatic discharge protection circuit of claim 11 wherein the optical disk drive is a slim optical disk drive.